DRAM

## STAKEHOLDER'S DISCUSSION DRAFT

# BEYOND THE THREE YEAR ACCORD -INSTITUTIONAL ELEMENTS OF A LONG-TERM AGREEMENT

**FEBRUARY 8, 1996** 

### **CONTENTS**

|    | Exe                                                           | CUTIVE SUMMARY                                                    | 1  |  |  |  |  |
|----|---------------------------------------------------------------|-------------------------------------------------------------------|----|--|--|--|--|
| 1. | Inti                                                          | RODUCTION                                                         | 2  |  |  |  |  |
| 2. | BASIC PREMISES                                                |                                                                   |    |  |  |  |  |
| 3. | TIMELINE FOR DEVELOPMENT OF GUARANTEES                        |                                                                   |    |  |  |  |  |
| 4. | Example #1: Institutional Elements Applied to a "Canal-Based" |                                                                   |    |  |  |  |  |
|    |                                                               | ERNATIVE                                                          |    |  |  |  |  |
|    | 4.1.                                                          | Major Design Components                                           |    |  |  |  |  |
|    | 4.2.                                                          | Benefits/Equity Assessment                                        |    |  |  |  |  |
|    | 4.3.                                                          | Operational Considerations                                        |    |  |  |  |  |
|    | 4.4.                                                          | Institutional Considerations                                      |    |  |  |  |  |
|    | 4.5.                                                          | Financing Considerations                                          | 6  |  |  |  |  |
| 5. | EXA                                                           | Example #2: Institutional Elements Applied to a "Non-Canal-Based" |    |  |  |  |  |
| ٥. | ALTI                                                          | ALTERNATIVE                                                       |    |  |  |  |  |
|    | 5.1.                                                          | Major Design Components                                           | 7  |  |  |  |  |
|    | 5.2.                                                          | Benefits/Equity Assessment                                        | 8  |  |  |  |  |
|    | 5.3.                                                          | Operational Considerations                                        | 8  |  |  |  |  |
|    | 5.4.                                                          | Institutional Considerations                                      |    |  |  |  |  |
|    | 5.5.                                                          | Financing Considerations                                          | 8  |  |  |  |  |
| 5. | Envi                                                          | RONMENTAL/AGRICULTURAL/URBAN                                      |    |  |  |  |  |
|    | VIEW                                                          | /S ON CANAL/NON-CANAL-BASED INSTITUTIONAL ELEMENTS                | 9  |  |  |  |  |
| 7. | Poss                                                          | IBLE FORM OF A CONSENSUS AGREEMENT PACKAGE                        | 10 |  |  |  |  |
| 3. | ADDI                                                          | TIONAL DETAILS ON INSTITUTIONAL CONCEPTS                          |    |  |  |  |  |
|    | 8.1.                                                          |                                                                   |    |  |  |  |  |
|    | 8.2.                                                          | Market-Driven Water Management Concept                            |    |  |  |  |  |
|    | 8.3.                                                          | Joint Use/Mutual Benefit Storage Concept                          | 16 |  |  |  |  |
|    | 8.4.                                                          | Bay-Delta Restoration Coordination                                | 19 |  |  |  |  |
|    | 8.5.                                                          | Permitting Assurances                                             |    |  |  |  |  |
|    | 8.6.                                                          | Demand Management Incentive Programs                              | 20 |  |  |  |  |
|    | 8.7.                                                          | Mechanisms to Assure Regulatory Shelf-Life                        | 21 |  |  |  |  |
|    | 8.8.                                                          | Institutional Reforms to Facilitate Water Transfer                | 21 |  |  |  |  |
|    |                                                               |                                                                   |    |  |  |  |  |
|    |                                                               | # # #                                                             |    |  |  |  |  |

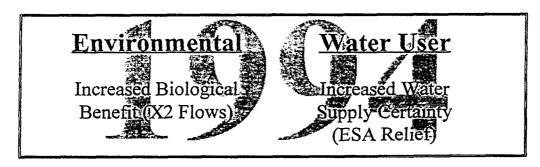
#### **EXECUTIVE SUMMARY**

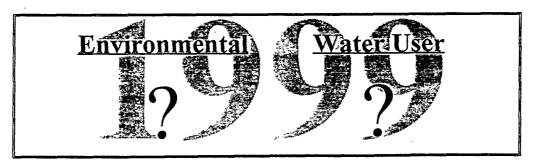
The following "draft" Institutional Reforms paper was prepared in response to discussions at the Stakeholder Policy Group meeting on December 14, 1995. These discussions centered on focusing the work effort on developing specific institutional actions necessary to implement a conveyance/habitat improvement alternative. Previous institutional efforts have focused on developing a set of institutional principles. However, this led to concerns over the development of consensus on generalized/non-specific principles.

This paper is an effort to solicit discussion on what institutional mechanisms or legal/legislative assurances it will take to develop consensus around a Long-Term Agreement in 1999. The paper summarizes environmental/agricultural/urban views on guarantees/actions necessary to implement either a generic non-canal-based alternative or a canal-based alternative.

The key reform that drove the consensus package in the December 1994 Accord centered on providing additional outflow during environmentally critical fishery periods in exchange for water user relief from additional endangered species listing. What will be the key reform to continue this successful consensus effort?

### **Key Accord Reform**





#### 1.0 Introduction

This paper is an effort to solicit detailed discussion on what institutional mechanisms or legal/legislative assurances it will take to develop consensus around a Long-Term Agreement in 1999. Potential elements include:

#### 1. Environmental Mechanisms/Assurances

- Staging of environmental/water supply benefits
- Instream flow guarantees
- Non-flow measures (e.g. habitat restoration, etc.)
- Wet-year banking & conjunctive use reforms
- Market-driven management approaches

#### 2. Financing Assurances/Mechanisms

- Staging of funding
- Financing Guarantees
- Financing Options: Bonds, User Fees, etc.

#### 3. Water Supply Mechanisms/Assurances

- Mechanisms to assure regulatory shelf-life (e.g. Pre-ESA listing agreements)
- Operating/permitting assurances
- Amendments to the State/Federal Coordinated Operating Agreement
- Institutional reforms to facilitate water transfers

#### 4. Demand Management Mechanisms/Assurances

- Urban BMP program implementation
- Agricultural Efficient Water Use program implementation

The paper summarizes environmental/agricultural/urban views on guarantees/actions necessary to implement either a generic non-canal-based alternative or a canal-based alternative. The conveyance/habitat improvement alternatives used in this analysis are presented for discussion purposes only.

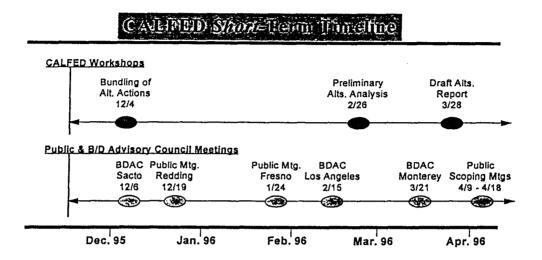
#### 2.0 BASIC PREMISES

In the past, initiatives to solve Delta problems usually created benefits for one side at the expense of another. This lead to numerous lawsuits and political gridlock in solving the Bay-Delta problems. However, with the signing of the December 1994 Accord Stakeholder interest groups, as well as State and Federal agencies, committed themselves to work in an open and collaborative process. The keystone to continuing this consensus effort is to assure that any present or future litigation does not undermine the building of a long-term agreement. To assure this, key interest groups need to continue developing water management strategies that:

- Guarantee expected performance & benefits;
- Permit regulatory and management flexibility;
- Build long-term certainty into regulatory requirements;
- Spread the costs & benefits of Delta improvements equitably;
- Facilitate & accelerate the attainment of benefits; and
- Expand the benefits obtained from the use of the developed water supply.

#### 3.0 TIMELINE FOR DEVELOPMENT OF GUARANTEES

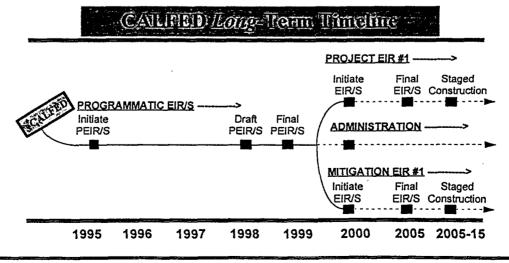
Over the next few months, CALFED will be combining a list of actions into a set of alternative packages. The first set of alternative packages will not include operating, institutional, or financial considerations. As these packages become refined in the following months it is important that the Stakeholders have a strategy for addressing these concerns. The following timeline depicts the CALFED schedule through March 1996.



On long-term timeline, implementation of the alternative package will take approximately 20 years. This includes development of:

- 1. Programmatic environmental documents (EIR/S)
- -- 1995 through 1999;
- 2. Project EIR/S and design documents
- -- 1999 through 2005; and
- 3. Permitting review and construction
- -- 2005 through 2015.

At each stage in this process there will be appropriate times to go forward with progressively more specific State and Federal legislation or Stakeholder M.O.U.s to guarantee operating, institutional, and financial actions.

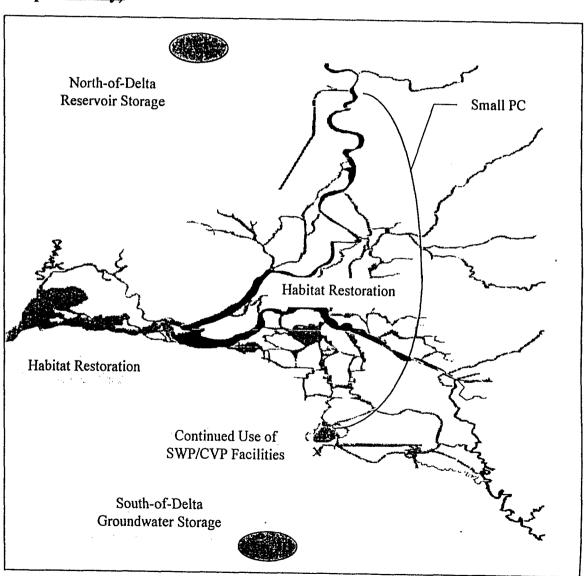


G-000537

## 4.0 EXAMPLE #1: INSTITUTIONAL ELEMENTS APPLIED TO A "CANAL-BASED" ALTERNATIVE

### Major Design Components (For Example Purposes Only)

- Continued use of current SWP/CVP facilities
- A small isolated canal
- Habitat restoration
- Levee maintenance & improvements
- South-of-Delta conjunctive use
- North-of-Delta off-stream reservoir
- Demand management actions



G-000538

## 4.0 Example #1: Institutional Elements Applied to a "Canal-Based" Alternative (Continued)

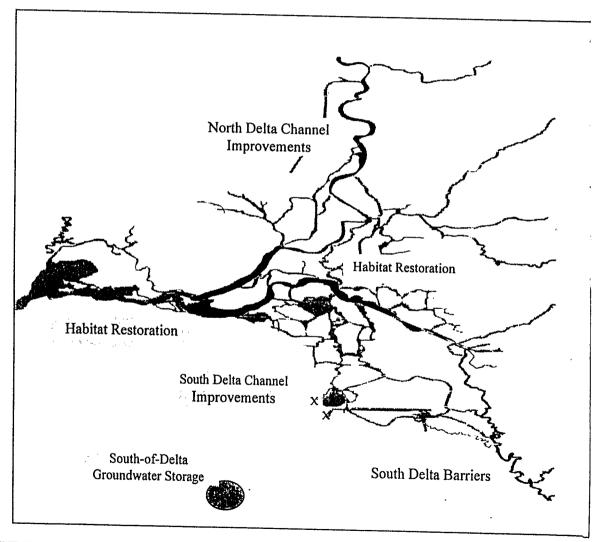
| Major Design Components                     | Operating Considerations                                                                           | Institutional Considerations                                                                                                                                                                                                                                  | Financing Considerations                                                        |
|---------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| SMALL PC                                    | Year-Round Diversions     Operational Plan                                                         | <ul> <li>Who is the Owner &amp; Operator?</li> <li>Water Transfer Reforms</li> <li>Operational Guarantees (Regulatory, legislative, or Property Rt. Based)</li> <li>Staging of Urban/Ag/Enviro. Benefits</li> <li>Long-Term Wtr. Supply Assurances</li> </ul> | SWP / CVP Solely Responsible for Capital & O&M     " OR "     Joint Use Facilty |
| MAINTAIN CURRENT<br>SWP & CVP FACILITIES    | Surplus Flow Diversions Only     (Winter & Early Spring)                                           | Development of Wtr. Transfer Reforms     Staging of Urban/Ag/Enviro. Benefits     Long-Term Wtr. Supply Assurances                                                                                                                                            | SWP / CVP Solely Responsible for<br>Capital & O&M                               |
| HABITAT RESTORATION                         | Flows and O&M Plan To Maintain Wetlands O & M Plans for New Screens Category III Actions           | <ul> <li>Long-Term / Category III Crediting</li> <li>Coordinate Existing &amp; New Restoration<br/>Programs</li> <li>Assured Funding Stream</li> </ul>                                                                                                        | G. O. Bonds (Public)  Water User Fees                                           |
| FLOWS (X2, DEC. ACCORD, OPS REQS)           | Compliance with SWRCB Standards                                                                    | Negotiated Water Right Settlement                                                                                                                                                                                                                             | Negotiated Water Right Settlement                                               |
| ADAPTIVE MANAGEMENT                         | Effectiveness of IEP Monitoring     Decision-Making Structure to     Implement Adaptive Management | Assured Funding Stream     Revised IEP Monitoring Programs     Decision-Making Structure to     Implement Adaptive Management                                                                                                                                 | Water User Fees     Re-Allocation of SWP/CVP/CVPIA     Payments                 |
| DEMAND MANAGEMENT<br>(URBAN, AG, STATEWIDE) | Demand Management Compliance     Incentives     Implementation of Urban/Ag BMPs                    | Compliance Requirements with BMPs                                                                                                                                                                                                                             | Local Agency Financing (Urban)     District Financing (Ag)                      |
| NORTII-OF-DELTA<br>STORAGE (OFFSTREAM)      | Operating Plan to Transfer & Utilize     Environmental/Urban/Ag Banked     Storage                 | <ul> <li>Amendments to C.O.A.</li> <li>Transfer Reforms</li> <li>Operating Guarantees</li> <li>E.I.R. Assurances</li> <li>Staging &amp; Long-Term Assurances</li> </ul>                                                                                       | Capital Opt In/Out (Water Users) G. O. Bonds (Public)  I                        |
| SOUTH-OF-DELTA<br>CONJUNCTIVE USE           | Operating Plan to Transfer & Utilize     Environmental/Urban/Ag Banked     Storage                 | Amendments to C.O.A.     State of Groundwater Management     Transfer Reforms     Staging & Long-Term Assurances                                                                                                                                              | Water User Fees     Environmental Fees                                          |

G-000539

## 5.0 Example #2: Institutional Elements Applied to a "Non-Canal-Based" Alternative

## Major Design Components (For Example Purposes Only)

- Continued use of current SWP/CVP facilities
- Habitat restoration
- Levee maintenance & improvements
- North Delta channel improvements
- South-of-Delta conjunctive use
- South Delta barriers
- South Delta channel improvements
- Demand management actions



## 5.0 EXAMPLE #2: INSTITUTIONAL ELEMENTS APPLIED TO A "NON-CANAL-BASED" ALTERNATIVE (CONTINUED)

| Major Design Components                     | Operating Considerations                                                                                                                 | Institutional Considerations                                                                                                                           | Financing Considerations                                            |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| MAINTAIN CURRENT<br>SWP/CVP FACILITIES      | Year-Round Diversions                                                                                                                    | Development of Wtr. Transfer Reforms     Staging of Urban/Ag/Enviro. Benefits     Long-Term Wtr. Supply Assurances                                     | SWP / CVP Solely Responsible for Capital & O&M                      |
| HABITAT RESTORATION                         | <ul> <li>Flows and O&amp;M Plan To Maintain<br/>Wetlands</li> <li>O&amp;M Plans for New Screens</li> <li>Category III Actions</li> </ul> | <ul> <li>Long-Term / Category III Crediting</li> <li>Coordinate Existing &amp; New Restoration<br/>Programs</li> <li>Assured Funding Stream</li> </ul> | G. O. Bonds (Public)  Water User Fees                               |
| FLOWS<br>(X2, DEC. ACCORD, OPS REQS)        | Compliance with SWRCB Standards                                                                                                          | Negotiated Water Right Settlement                                                                                                                      | Negotiated Water Right Settlement                                   |
| ADAPTIVE MANAGEMENT                         | Effectiveness of IEP Monitoring     Decision-Making Structure to     Implement Adaptive Management                                       | Revised IEP Monitoring Programs     Decision-Making Structure to     Implement Adaptive Management     Assured Funding Stream                          | Water User Fees     Re-Allocation of SWP/CVP/CVPIA     Payments     |
| DEMAND MANAGEMENT<br>(URBAN, AG, STATEWIDE) | Demand Management Compliance     Incentives     Implementation of Urban/Ag BMPs                                                          | Compliance Requirements with BMPs                                                                                                                      | Local Agency Financing (Urban)     District Financing (Agriculture) |
| NORTHERN & SOUTHERN<br>CHANNEL IMPROVEMENTS | New Operating Plan for Delta Cross     Channel                                                                                           | Amendments to C.O.A.     E.I.R. Assurances                                                                                                             | Water User Fees     G. O. Bonds (Public)                            |
| SOUTHERN DELTA<br>BARRIERS                  | Operating Plan to Open/Close Barriers                                                                                                    | Amendments to C.O.A.     Staging of Barriers     EIR Assurances                                                                                        | SB900 (Public)     Water User Fees                                  |
| SOUTH-OF-DELTA<br>CONJUNCTIVE USE           | Operating Plan to Transfer & Utilize<br>Environmental/Urban/Ag Banked<br>Storage                                                         | Amendments to C.O.A.     Transfer Reforms     State of Groundwater Management     E.I.R. Assurances     Staging & Long-Term Assurances                 | Water User Fees     Environmental Fees                              |

## 6.0 ENVIRONMENTAL/AGRICULTURAL/URBAN VIEWS ON CANAL/NON-CANAL-BASED INSTITUTIONAL & FINANCIAL ISSUES

The following section describes some appoaches and views on what is needed from an institutional guarantee standpoint to develop consensus beyond the three year Accord. The partial list of institutional reforms are derived from the matrices shown in Section 4.0 and Section 5.0.

|                      | Institutional<br>Issue of Concern                     | GUARANTEE<br>Approach                                                                                                              | Incentive<br>Approach                                              | PHYSICAL<br>SOLUTION                                                |
|----------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------|
| Ecosystem Assurances |                                                       |                                                                                                                                    |                                                                    |                                                                     |
| •                    | Financing<br>improvements                             | State bond act & legislated user fees                                                                                              | Additional water or changes in standards in exchange for financing | N/A                                                                 |
| •                    | Flow assurances & Ops guarantees                      | Contract, legislation,<br>C.O.A amendments                                                                                         | Enviro/urban/agric.<br>entitlement                                 | Four-way ownership of new conveyance/ storage facilities or no P.C. |
| •                    | Staging of benefits                                   | CALFED M.O.U. & P.E.I.S. recomm.                                                                                                   |                                                                    | N/A                                                                 |
| •                    | Early start enviro.<br>projects                       | Crediting agreements and permitting assur.                                                                                         |                                                                    | N/A                                                                 |
| •                    | Specific ecological<br>results (e.g. ESA<br>recovery) | Reduce diversions or increase investments until results obtained                                                                   | Adaptive mgmt.;<br>build scientific base<br>thru monitoring        | Eliminate<br>entrainment                                            |
| •                    | Adaptive mngmnt.<br>plan                              | Expand Ops Group<br>authority; staging &<br>early start projects;<br>increased supply<br>flexibility; habitat<br>conservation plan |                                                                    | N/A                                                                 |
| •                    | ***************************************               |                                                                                                                                    |                                                                    |                                                                     |
| W                    | tr Supply Assurances                                  |                                                                                                                                    |                                                                    |                                                                     |
| •                    | Mechanisms for<br>ESA relief (A Deal-<br>is-A-Deal)   | MSHCP, pre-listing agreement, or State/Fed MOU                                                                                     | Adaptive management to adjust, subject to no net loss              | Eliminate<br>entrainment, etc.                                      |

| •  | A 'Deal-is-A-Deal'<br>operationally                    | "                                       |                                         | N/A                                           |
|----|--------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------------|
| •  | Financing of new facilities                            | State bond act & legislated user fees   |                                         | Public/Ag/Urban<br>financing &<br>entitlement |
| •  | Ownership of new<br>facilities                         |                                         | Joint use / mutual<br>benefit           | N/A                                           |
| •  | Early attainment of benefits (estim. implem. 2005-15)  |                                         |                                         |                                               |
| •  | ***************************************                |                                         |                                         |                                               |
| W  | tr Quality Assurances                                  |                                         | *************************************** |                                               |
| •  | Improvement in 'in-<br>Delta' water quality            |                                         |                                         | Common pool of supplies                       |
| •  | Improvement in drinking wtr quality                    |                                         |                                         | Physical isolation of drinking wtr supplies   |
| •  |                                                        |                                         |                                         | ***************************************       |
| De | mand Mngmt Assur.                                      | *************************************** | *************************************** |                                               |
| •  | Implementation/ compliance with conservation BMPs      | Three-way MOU or legislation            | Financial incentive programs            |                                               |
| •  | Implementation/<br>compliance with<br>reclamation BMPs | Three-way MOU or legislation            | Financial incentive programs            |                                               |
| •  |                                                        |                                         |                                         |                                               |

The following matrix describes the environmental, urban, and agricultural views on the appropriate institutional solution to these issues of concern.

| Institutional<br>Issue of Concern                                           | Environmental<br>View                   | Agricultural<br>View                    | Urban<br>View                              |
|-----------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|--------------------------------------------|
| Ecosystem Assurances                                                        |                                         |                                         |                                            |
| Financing improvements                                                      |                                         |                                         | State bond act & legislated user fees      |
| Flow assurances & Ops guarantees                                            |                                         |                                         |                                            |
| Staging of benefits                                                         |                                         |                                         | CALFED M.O.U. & P.E.I.S. recomm.           |
| <ul> <li>Early start enviro.</li> <li>projects</li> </ul>                   |                                         |                                         | Crediting agreements and permitting assur. |
| <ul> <li>Specific ecological<br/>results (e.g. ESA<br/>recovery)</li> </ul> |                                         |                                         |                                            |
| Adaptive mngmnt.  plan                                                      |                                         |                                         |                                            |
| •                                                                           | *************************************** | **************************************  |                                            |
| Wtr Supply Assurances                                                       |                                         | *************************************** |                                            |
| Mechanisms for<br>ESA relief (A Deal-<br>is-A-Deal)                         |                                         |                                         |                                            |
| • A 'Deal-is-A-Deal' operationally                                          |                                         |                                         |                                            |
| Financing of new facilities                                                 |                                         |                                         | State bond act & legislated user fees      |
| Ownership of new facilities                                                 |                                         |                                         | Joint use / mutual<br>benefit              |
| • Early attainment of benefits (estim. implem. 2005-15)                     |                                         |                                         |                                            |
| •                                                                           |                                         |                                         |                                            |
| Wtr Quality Assurances                                                      |                                         |                                         |                                            |

| Improvement in 'in- Delta' water quality                  |                                                       |
|-----------------------------------------------------------|-------------------------------------------------------|
| Improvement in     drinking wtr quality                   | Physical isolation of drinking wtr supplies           |
| •                                                         |                                                       |
| Demand Mngmt Assur.                                       |                                                       |
| Implementation/     compliance with     conservation BMPs | Three-way MOU; volunt. compliance; enhanced reporting |
| Implementation/     compliance with     reclamation BMPs  | Three-way MOU                                         |
| •                                                         |                                                       |

#### 7.0 Possible Form of A Consensus Agreement Package

The following outline illustrates one possible form of a consensus agreement package.

#### Three-Tiered Approach

- 1. Multi-Party Agreement
  - Governor
  - State Agencies: DWR, DFG, Cal-EPA, Resource Agency
  - Secretary of Interior
  - Secretary of Commerce
  - EPA Administrator
  - Federal Agencies: USBR, USFWS, NMFS, EPA, COA
  - Environmental/Agricultural/Urban agencies
- 2. Federal Legislation
  - Incorporates substance of guarantees & partial funding
  - Designates Bay-Delta System as one of national significance
  - Authorizes Federal agencies to sign contract
- 3. State Legislation
  - Incorporates substance of guarantees & partial funding

#### 8.0 ADDITIONAL DETAILS ON INSTITUTIONAL CONCEPTS

The following section gives additional details on institutional elements and possible combinations of these elements into consensus agreement packages. These elements are for example purposes only and are not presently endorsed by any agencies.

#### 8.1 Staging of Environmental/Water Supply Benefits

A long-term agreement should include provisions that guarantee implementation of certain water supply enhancement measures concurrently with environmental protection measures. If these assurances are not in place, it is unlikely that sufficient support for a long-range agreement will emerge from the environmental community. Specific strategies include:

Shared Benefits at Each Stage. The timing and magnitude of benefits for various interested parties can create an antagonistic atmosphere among non-beneficiaries. This can additionally discourage further support of the overall program. The goal of this concept is to stage implementation of actions in a manner that ensures equal or comparable benefits to all major parties upon completion of each stage. Criteria for 'comparability' could include:

- 1. Dollar amounts expended or committed;
- 2. Negotiated 'weighting' of various benefits; and
- 3. Agreement among beneficiaries on relative benefits of any particular stage.

Integration of Preliminary Actions into Programmatic Environmental Documentation. Delaying implementation of specific measures until the Programmatic Environmental Impact Report/Statement (EIR/S) becomes final could result in no significant progress for ten years or more. Additionally, the lack of assurance that preliminary actions will provide credit toward future liabilities under the Preferred Alternative discourages parties from underwriting preliminary actions. The goals of this concept are to:

- 1. Implement specific measures having strong support among all Stakeholders as soon as possible; and
- 2. Formulate an memorandum of understanding to provide assurances that appropriate preliminary actions will be recognized in the Programmatic EIR/S and credited when formulating an implementation plan for the remaining aspects of the Preferred Alternative.

Avoiding Delays from Revisitation of Decisions. Parties signatory to a long-term agreement can delay implementation of future implementation stages by casting doubt on previous decisions. This can lead to backtracking of regulatory decisions and eventual gridlock. For example, major reconsideration of the Programmatic EIR/S or Section 404(b)(1) after commencement of the Preferred Alternative could devastate the prospects for realizing a long-

range Bay-Delta solution. The goal of this concept is to develop an agreement with regulatory agencies that provides the greatest legal assurance against regulatory reversals.

#### 8.2 Market-Driven Water Management Concept

The market-driven water management concept is an attempt at utilizing the benefits of market forces to meet water supply reliability, increased biological protection, and efficient use goals. A write-up based on this concept was developed by Natural Heritage Institute (see paper by David Fullerton, *Concepts For Future Delta Management*, November 6, 1995). The market-driven concept summarized below was developed by the Metropolitan Water District. Although it borrows a number of the elements described in the Fullerton paper, there are some additional elements and changes. The Metropolitan market-driven concept would essentially:

- 1. Develop certain environmental property rights to end agricultural, urban, and environmental polarization and provide incentives for future water development and habitat enhancement;
- 2. Make environmental interests a partner in storage and conveyance projects with the ability to buy, sell, store, or transfer water; and
- 3. Provide a revenue stream for environmental interests to self-fund habitat enhancement projects and buy water for instream flows during critical biological periods.

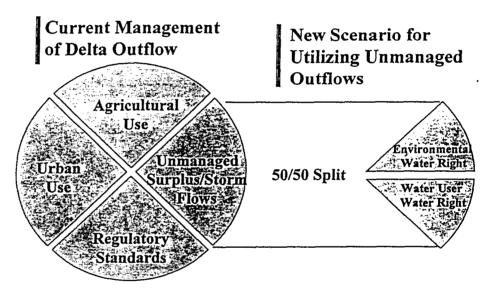
The following is a summarized description of this concept:

 An Environmental Water Authority (EWA) or subcommittee of CALFED would be created to hold and manage these environmental water rights. This would include buying, selling, storing, developing, and transferring 'new' water. They would also be responsible for mitigating any environmental impact due to the storing or transferring of this water. The new environmental organization would consist of Northern and Southern California environmental interests.

### Possibly Exemples of EWA Authority

- Percentage ownership in an isolated canal or storage facility (if any)
- · Right to store & transfer water in new facilities
- Right to sell their percentage capacity/storage in new facilities
- Others

- This EWA or CALFED Committee could buy-in and own a regulatory right to a percentage of "new water" developed in the future. This new water would consist of the following:
  - 1. Unmanaged surplus flows which are above regulatory environmental requirements, but which cannot be diverted by users under the baseline conditions. This consists of flows below the 35% or 65% export limits, such as storm flows. Presently, not all surplus flows are needed for environmental protection and can provide more value to the environment if shifted to other periods of the year (e.g. providing relief during critical year). Developing rights to these unmanaged flows for both environmental and water interests provides incentives to develop increased storage, cooperative transfer agreements, and additional biological protection during critically dry periods; and

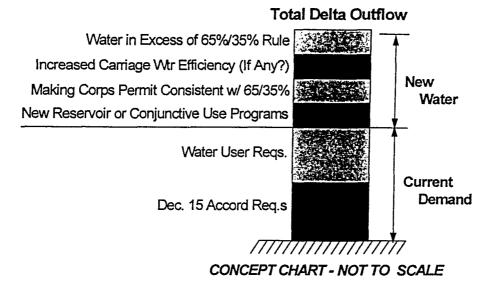


Unmanaged surplus/storm flows that cannot be captured by the SWP or CVP have little benefit during biologically critical periods.

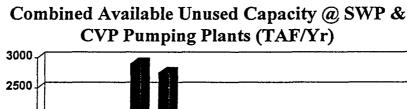
Developing rights to these unmanaged flows provides incentives to both environmental & water users to develop additional storage, transfer agreements, biol. protection, etc.

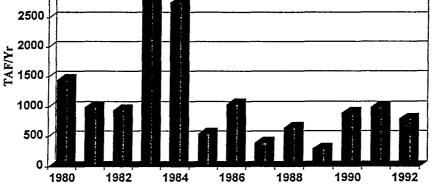
2. Other water management concepts that increase water use efficiency for both the environment and the urban and agricultural users. These concepts include: (1) the development of conveyance improvements that decrease carriage water inefficiencies; (2) the development of conjunctive use storage programs that supplement water banking opportunities in Central and Southern California; (3) the development of offstream storage programs in northern or southern California; and (4) modification of the Corps of Engineers 404 permit on pumping limitations at the State export facilities to be consistent with the 35% /65% State Water Project/Central Valley Project export limitations.

#### New Water: Where Will It Come From?



- The December 15, 1994 Accord would be the baseline for regulatory environmental standards for more than three years.
- The risk of new listing under the Endangered Species Act listing would be the responsibility of the federal government (i.e. the federal government would be committed to making up the difference through water purchases . . . similar to the current wording in the December 15, 1994 Accord).
- The EWA would have the ability to enforce operational guarantees for the entitlement supply or conveyance capacity.
- The EWA would have the ability to purchase CVP or SWP export capacity during environmentally sensitive periods. The graph below shows the proportion of excess capacity available during drought and wet years.





capacity available during drought and wet years.

• The EWA would have a water sales based revenue stream similar to all other urban and agricultural water districts. This revenue stream could then be used to fund habitat restoration, purchase instream flows, screen diversions, research the effects of pollutants, etc.

## Possible Exemples of IIWA Funding Speem

- Sale of stored water
- Sale of storage capacity in new joint use facilities
- Sale of transfer capacity in new conveyance facilities
- Others

The benefits of this market-driven water management concept include the following:

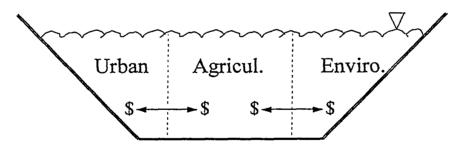
- Currently, the environment receives all surplus flows that are above regulatory
  requirements, often in high volumes resulting in minimal benefit. Surplus flows
  would be managed for enhanced uses and environemental benefit.
- If the SWRCB mandated any future changes to the baseline regulatory standards, it would affect both environmental and water user interests. (e.g. a tightening of the standards would reduce the amount of water the Environmental Water Authority has control of, thereby effectively reducing their water rights.)
- Environmental and water users interests would be more inclined to reach consensus on a uniform water transfer approval process, since both interests would now benefit from these guidelines.
- Environmental and water user interests would be less polarized and less prone to gridlock.
- Environmental costs of water development would be internalized.
- Incentives would be provided for more efficient water management of unused surplus flows.
- Incentives would be provided for environmental interests to store surplus flows, which they could later sell or use during a drought.
- This approach would be consistent with the CALFED principles and the Governor's Policy on providing benefits to both water users and the environment (i.e. no one-party getting ahead of the other).

As with any new management concept, these are a number of negatives that need to be overcome before it is considered. These include:

- Environmental property rights could limit the potential for environmental restoration through water reallocations (e.g. using the Public Trust Doctrine).
- Environmental property rights could represent a barrier to future water development, since the environment would hold a partial property right to unmanaged flows.
- Full regulatory approach leaves the door open to uncompensated water reallocations.
- If South-of-Delta facilities were constructed, then increased ability to pump at full capacity would represent a change in baseline conditions and would infringe upon the environment's baseline property rights. However, an agreement could be struck in which both sides benefited.
- Unclear whether the State Water Resources Control Board has the authority to assign water rights to unmanaged flows. Even if they did, to whom would they assign the new water-user rights?
- If the federal governmental is not willing to continue to indemnify water users against all future ESA listings, then water users would receive less benefit from agreeing to split the unmanaged flows currently controlled by the environment.

#### 8.3 Joint Use / Mutual Benefit Storage Program

The concept of this program is to develop an off-stream reservoir or conjunctive use groundwater storage where a percentage of its capacity is dedicated to environmental storage and use. The reservoir or groundwater storage would be paid for by a combination of General Obligation Bonds and water user funds. These bonds could be partially paid for by the sale of



New joint storage/conveyance facilities could provide increased consensus in developing essential operational guarantees & water transfer reforms

water not utilized for environmental purposes. Benefits of such a program include:

#### 1. North-of-Delta Reservoir Option:

• Northern & Southern California Consumptive Use Benefits. If the reservoir was built North-of-the-Delta, it would assist both urban and agricultural interests in developing a

portion of these unmanaged flows for consumptive use both North and South of the Delta;

- Northern & Southern California Biological Benefits. A Northern California off-stream reservoir would provide an opportunity to capture unmanaged surplus flows for later use during a drought or critical fishery period. These flows could enhance both instream flows on Northern stream or rivers and in-Delta water quality;
- Natural Disaster Protection. In the event of an earthquake causing an in-Delta levee breach, a North-of-Delta reservoir could be used to assist in flushing out any increase in total dissolved solids;
- Flood Control. A North-of-Delta reservoir, either 'on' or off-stream, would provide increased protection flooding of urbanized areas. The on-stream reservoir would provide direct relief through dedication of a portion of its capacity to store winter and spring-time flood flows. Whereas, an off-stream reservoir would use varying operational schemes in combination with the other on-stream reservoirs to increase total flood control capacity.

#### 2. South-of-the-Delta Reservoir Option:

- <u>California Consumptive Use Benefits</u>. If the reservoir was built South-of-the-Delta, it would assist Bay Area and South-of-Delta urban and agricultural interests in developing a portion of these unmanaged flows for consumptive use;
- Northern & Southern California Biological Benefits. If the reservoir was built South-ofthe-Delta, it would provide an opportunity to reduce exports by the State and Federal pumping plants during the biologically sensitive period of February through June of drier years. This in turn would free up flows to provide biological benefits both instream and in-Delta;
- <u>Natural Disaster Protection</u>. In the event of an earthquake damaging the Delta levee structure, a South-of-Delta reservoir would augment emergency water supplies to export water users;

#### 3. South-of-the-Delta Conjunctive Use Groundwater Storage:

• Same benefits as #2 at, most likely, a reduced capital investment.

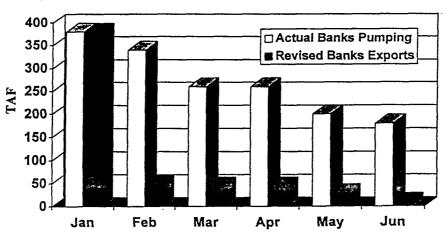
#### 4. Common Benefits:

• Re-Operation of Existing Reservoirs. Additional storage could provide for re-operation of existing reservoirs to benefit both environmental and water users needs;

- CALFED Ops Group Flexibility. Additional flexibility would be provided to the CALFED Operations Group to implement environmentally protective actions. This includes short-duration pulse flows and reducing pumping during high fish density periods in the southern Delta;
- <u>Self-Funded Environmental Trust</u>. A portion of the water stored could be sold to willing buyers to create an permanent self-funding environmental restoration trust account. These monies could in turn fund habitat restoration programs and to partially pay-off the construction bonds;
- Enhanced Water Quality. Higher dry year outflows will provide water quality benefits to both the estuary and the water users. This will reduce the cost associated with urban water treatment plants and keep agricultural water quality within acceptable levels;
- <u>Assured Regulatory Standards</u>. Additional storage of unmanaged flows would provide assurance that water quality standards would be met in a drought year. This in turn would reduce the likelihood of litigation by one of the parties; and

To illustrate how this concept would work, a scenario has been created of how critical dry year (1988) could have been reoperated to increase environmental protection and water supply reliability.

## Hypothetical Reoperation of a Critical Water Year (1988) with an Additional 1.7 MAF of Storage



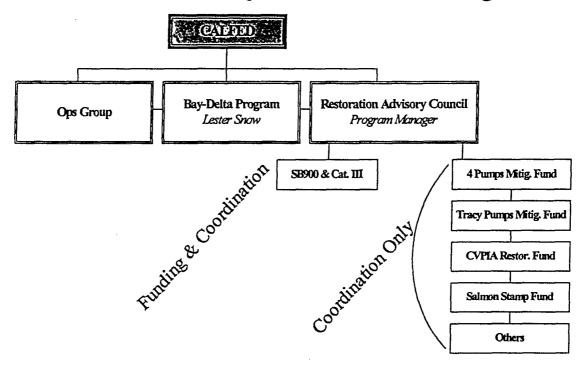
Additional storage could provide enhanced benefits through reduced pumping during critical fishery periods

#### 8.4 Bay-Delta Habitat Restoration Coordination

The goal behind this concept is to create an 'advisory committee' consisting of environmental, urban, and agricultural representatives, similar to the current Category III committee, to coordinate various State and Federal Bay-Delta related restoration programs. The committee would make recommendations on prioritizing, approving, and funding restoration projects from the following funds: SB900; CVPIA; Category III; SWP Four-Pumps Mitigation; CVP Tracy Pumps Mitigation; and others.

CALFED would also be empowered as the central agency with final recommendations on the coordination of these restoration programs.

### Coordination of Bay-Delta Restoration Programs



#### 8.5 Permitting Assurances

Permitting assurances from State and Federal regulatory agencies are critical to ensuring that we will achieve closure on endangered species, wetlands and project planning issues. CALFED recognizes that program and project EIR/S's will be needed. Project implementation and permits are quite some time away, and we must have assurance that today's process will be used as the basis for those future regulatory reviews. Additionally, further assurances are needed that federal agencies will fully cooperate with each other and with the State of California to act in a consistent and timely manner. Specific permitting strategies include:

- Endangered Species Act Assurances. Assurance that resolution of threatened and endangered species issues within the aquatic environments of the Bay-Delta watershed will be for the long-term with management flexibility within specified ranges of actions, thereby providing a measure of certainty for all stakeholders.
- <u>Clean Water Act Assurances</u>. Assurance that Clean Water Act permitting will be forthcoming in a timely and predictable manner for program-level and project-level decision-making. Program-level compliance with 404(b)(1) Guidelines will provide a firm basis for subsequent project-level permitting with no need to revisit program decisions.
- CEQA/NEPA Assurances. Assurance that State and Federal agencies with decision-making authority in the Bay-Delta will act in a consistent, comprehensive and timely manner to allow a long-term solution to be identified, approved, and implemented over time. The CALFED process provides incomplete assurance: not all regulatory agencies are signatories to the Framework Agreement (e.g. Corps of Engineers, Federal Energy Regulatory Commission), and CALFED is a political body, not a legal one (e.g. joint powers authority).
- State Regional Water Quality Control Board Assurances. Assurances that State Regional Water Quality Control Board permits will be forthcoming in a timely and predictable manner for program-level and project-level decision-making.

#### 8.6 Mechanisms to Assure Regulatory Shelf-Life

As part of a long-term agreement, urban and agricultural interests will require assurances that implementation of the plan will increase water supply reliability and water quality. This will require commitments from regulatory agencies who approve the plan that they will not revise their requirements for a certain period of time. The approach toward Endangered Species Act implementation under the December 1994 Bay-Delta Accord is an example of such an assurance.

Presently, it is unclear to what extent federal and state resource agencies can make such commitments under their existing law. To the extent statutory changes are necessary to effectuate workable "regulatory shelf-life" policies, Stakeholders should agree collectively to support such legislation. Specific water supply strategies include:

- 1. Baseline Water Supply Responsibility
- 2. Optimum Use of Existing Facilities

- 3. Infrastructure for Banking & Conj. Use
- 4. Mutual Guarantees/Concurrent Performance
- 5. Water Transfer Plan
- 6. Water Quality Assurance Plan
- 7. Lock-in Interim Water Quality Standard
- 8. CALFED Operations Expansion

#### 8.7 Demand Management Incentive Programs

Although many urban and agricultural water users have improved the efficiency of their water use over the past decade, it may still be possible to enhance overall efficiency of use. The California Environmental Quality Act (CEQA) will require that the long-range management plan meet the project purposes in the least environmentally damaging manner. This standard may require demonstration of reasonably maximized efficiencies in the urban sector (and perhaps to a lesser extent in the agricultural sector). Specific demand management strategies include:

- 1. Water Use/Demand Management Efficiency Assurance
  - 1. Implementation of Urban BMP's with Enhanced Reporting
  - 2. Develop Agricultural BMP's (w/ Financing Incentive)
  - 3. Uniform Water Recycling Requirements to Speed Project Approval Process
  - 4. Water Reclamation BMP's
  - 5. Conjunctive Use
  - 6. Fallowing of Marginal Land
- 2. Local Groundwater Protection Measures
  - 1. Coordinated Ground & Surface Water Use Programs
  - 2. Local Basin Groundwater Drawdown Model

#### 8.8 Institutional Reforms to Facilitate Water Transfers

Concepts on the development of institutional reforms to facilitate water transfers have been discussed in both of water user and environmental forums. As of January 1996, fourteen organizations have committed resources to support the development of a water transfer handbook. A draft outline of this handbook is expected to be available for review in February 1996. Other efforts to develop consensus on this issue have been described in a paper developed by the Natural Heritage Institute (see paper by Greg Thomas & Tara Mueller, *Proposal on* 

Institutional Reforms to Facilitate Water Transfers, September 12, 1995). The following is an outline of that paper.

- 1. Issues Regarding Transfer of Water in General:
  - a. California Water Exchange
  - b. Encouraging District Buy-Back Programs
  - c. Dealing with Third Party Effects of Water Transfers
  - d. Fast-Track Transfer Approvals
  - e. Protecting Water Rights During and After Transfers
  - f. Facilitating Transfers Across the Delta
  - g. Transfers to Instream Uses.
  - h. Restrictions on Transfer of Groundwater
- 2. Issues Regarding Transfer of CVP Water
  - a. Prohibition Against Transferring Unused Contractual Entitlements Under CVP (Section 3405(a)(1)(A))
  - b. Profitability of Transfers (Section 3405(a)(1)(C) and (L))
  - c. Environmental Review Requirements under NEPA and CEQA (Section 3405(a)(1)(D) and (L))
  - d. Right of First Refusal (Section 3405(a)(1)(F))
  - e. Limitations on Quantity of Water Transferable and Finding of No Significant Impact on Groundwater (Section 305 (a)(1)(I) and (J))
  - f. Determination of No Unreasonable Impact (Section 3405(a)(1)(K))
  - g. Area of Origin Exception (Section 3405(a)(1)(M))
  - h. Amendment of Contract Terms (No CVPIA Section)

# #